

Exploring the Key Factors Influencing the Academic Performance of First Year Students at Undergraduate Level in Bangladesh

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Abstract

Since the number of students entering into the higher education system is increasing along with the dropout rates, therefore it is important for the institutions to identify the reasons that impact students' academic performance in order to introduce the provision for necessary support for the students. This study is stimulated by the demand to determine such factors at undergraduate level that cause academic failure and dropout rates. Therefore, this study attempts to investigate what students perceive as the key influential factor that effects the academic performance of first year undergraduate students at university level. A quantitative research approach was followed to conduct the study. A survey was designed with questionnaire and was administered. Total 450 first year students, both from public and private universities in Bangladesh, were selected by convenience and stratified simple random sampling. The findings of this study disclosed that appropriate choice of course of study; students' interest in the subject; regular attendance at lectures; timely and regular examination preparation; teachers' pedagogical knowledge and skills; effective written communications skills; effective study methods are the topmost success factors that influence students' academic performance. Oppositely, lack of interest in the course content; inadequate or poor exam preparation; irregular attendance at lectures/tutorials; late submission of assignments; lack of self-discipline, self-motivation and confidence; inability to distinguish between important and unimportant information; heavy course workload; inefficient time management reverse the academic performance of the students.

Keywords: Influential factors, Academic performance, First-year university students, Higher

education in Bangladesh, Students' performance in first year, Success factors of academic performance, Failure factors of academic performance

1. Introduction

In recent years, students' performance has received significant attention in the education literature. Students' academic performance is the measurement of student achievement across various academic subjects. Teachers and education officials typically measure achievement using classroom performance, graduation rates and results from standardized tests. Students' academic performance often defined students' grade point, test scores and persistence level (Finn & Rock, 1997). There are various methods of measuring students' academic performance in terms of success and or failure and this includes: Continuous Assessment (CA), Examination, Grade Point Average (GPA), Graduation rate etc. According to Rajandran et al. (2015), Student performance is generally viewed as product of socio-economic, psychological and environmental factors. Hence, the factors are expected to vary from one country to another.

Transition from school life to university life is one of the biggest challenges the first-year university students as it presents new opportunities to the students. This transitional phase sometimes effects their academic and personal life. According to Fisher and Hood (1987), from a psychological perspective, the transition to university life often involves the need to break from the old routines and previous life-cycles as to adjust to a new living environment, including adapting to new social and residential changes and challenges which may results in an increase in psychological disturbance, depression, obsession and absent-mindedness. The challenge for first-year students also come from unrealistic beliefs about class sizes, staff availability, and workload (Lowe & Cook, 2003; Smith & Hopkins, 2005; Crisp et al., 2009; Kandinko & Mawer, 2013; Hassel & Ridout, 2018) [cited in Hien et al. (2020)]. First-year students may lack the fundamental understanding of their course (Hien et al., 2020). In result, which may impact on the academic performance of the students in their first-year study.

Study skills has been found to be a stronger and more consistent predictor of academic performance by Schmelzer et al. (1987), Killen (1994), and Hassanbeigi et al. (2011) [cited in Hien et al. (2020)]. Some of the most important ones for university success, as identified by Hassanbeigi et al. (2011), comprise time management, concentration and memory; note-taking skills; anxiety management; organisational skills; motivation and attitude, and reading comprehension skills [cited in Hien et al. (2020)].

There is an implicit assumption that, students who are admitted into a higher education institution will be capable of successfully completing the course they have registered. Therefore, the students are left out with no other options except academic success. This huge pressure on the students to become successful may impact their academic performance at the very beginning of their academic journey at university level even though they have good academic records at high school level and university entrance examination. Killen (1994) suggested that, no matter how carefully they are constructed, school matriculation examinations or special university entrance examinations are not likely to be strong predictors of success at university because they do not measure non-intellective factors that

are related to many of the important influences on success that students encounter after they enroll at university. Killen (1994) concluded that some of the most significant factors in students' academic success at university were interest in the course, motivation, self-discipline and effort (none of which can be predicted directly from matriculation results).

There are ample of evidences in the literature on teaching and learning to suggest that factors such as teaching strategies (Bartz & Miller, 1991), the students' motivation (Talbot, 1990), the students' approach to studying (Meyer, 1990), the interaction between students and the academic and the social systems of the university (Tinto, 1975), cultural expectations (Ginsburg, 1992), psychosocial factors (McKenzie & Schweitzer, 2001) and numerous other factors (Watkins, 1984; Logan, 1990; Jacobi, 1991; Keef, 1992; Minnaert & Janssen, 1992) are likely to influence students' success at university [cited in Fraser and Killen (2003)].

According to Schmelzer et al. (1987), persistent and active study was the most common reason that college students gave for their academic success. Setting appropriate goals, a good study environment, and effective time management were also considered important. Academic failure was attributed primarily to lack of study, poor time management, and inadequate goal setting.

According to Olatunji et al. (2016), studies in the past have identified study habit, student's self-concept, teacher's qualification, teaching method, school environment and government as factors influencing students' academic performance and the primary environment of the students is the home and it stands to exert tremendous impact on students' achievements.

Considering the earlier research findings on influencing factors for students' academic performance, the study to explore the key factors that influence the academic performance of first-year students at undergraduate level in Bangladesh may provide a portrait to the university students, teachers, educators and administrators to understand and take necessary intervention to address this issue regards to academic performance as very few study have been conducted on this particular issue in Bangladesh. The results of this study may work as a literature on student academic performance, and will provide necessary guideline to those who are associated with higher education management system for intervening and decision making in concern to student academic performance.

1.1 Objective of the Study

The objective of this study was to explore the key factors what students perceive as the highly influential for academic success and or failure at the very early stage of their academic career.

2. Research Methodology

The methodology of the study is described through nature of the study, the sample and sampling design, instruments of data collection, and data analysis. These are spelled out in the following sections:

This study was quantitative in nature. In quantitative research, the investigator identifies a research problem based on trends in the field or on the need to explain why something occurs (Creswell, 2012).

A questionnaire with a list of success and failure factors was administered to collect information for the study. According to Lloyd et al. (2012) [cited in Sibanda et al. (2015)], questionnaires are considered as a reliable tool for quantitative studies. The items of the questionnaire were adopted from Killen's (1994) study on the success/failure factors that influence academic performance of students. This questionnaire was used by previous studies such as Fraser and Killen (2003, 2005), Zhang and Aasheim (2011), Ndlovu (2011), and Sibanda et al. (2015). Aside from demographic information, the questionnaire consisted of fifty (50) statements describing academic success factors and fifty-three (53) statements describing academic failure factors. These factors were ranked on a four-point Likert type questionnaire requiring participants to rank each factor from a range of 'not influential' to 'very influential' (NI = not influential, SI = slightly influential, FI = fairly influential, HI = highly influential).

One public university and one private university was chosen for the study following the convenience sampling technique. Only first year students, who have completed at least a semester were considered as a respondent based on their academic standing to accomplish the purpose for this study. Students who had a CGPA above 3.0 were considered as good academic performer or successful students, and students who had a CGPA below 2.0 were considered as poor performer or failed students. 450 students were selected by following stratified simple random sampling. Students were chosen from different academic disciplines.

In quantitative data analysis, data are analysed using mathematical procedures, called statistics. These analyses consist of breaking down the data into parts to answer the research questions (Creswell, 2012). In this study, data gathered from the questionnaire were analysed using simple descriptive methods along with appropriate regression analyses.

3. Results of the Study

The results from the "success factor" statements of the questionnaire are presented first, then the results from the "failure factor" statements are discussed followed by overall discussion.

3.1 Success Factor Statement Responses

Items on success factor for academic performance covered the range from 1 (Not Influential) to 4 (Highly Influential). The mean score with standard deviation of the responses given by first-year students ranged from 3.79 for 'Appropriate choice of course of study' to 2.61 for 'Encouragement, motivation and support from peer'. Subsequently, Students' interest in the subject (mean 3.72); Regular attendance at lectures (mean 3.71); Timely and regular examination preparation (mean 3.68); Teachers' pedagogical knowledge and skills (mean 3.63); Effective written communications skills (mean 3.59); Effective study methods (mean 3.57); Medium of study (English/Bangla) (mean 3.56); Teachers' professional knowledge and credentials (mean 3.52); Self-confidence (mean 3.49); Teachers who can inspire students' (mean 3.48); Tutorial support (mean 3.46); Self-motivation (mean 3.45); Self-discipline (mean 3.43); Regular study practice and Teacher student relationship (mean 3.41) are the topmost success factors that influence students' academic performance (Table 1).

Table 1. Comparison of mean ratings on ‘success factor’ items from first-year students

Question Items	Mean	Std. Deviation
Appropriate choice of course of study	3.79	0.498
Students’ interest in the subject	3.72	0.491
Regular attendance at lectures	3.71	0.821
Timely and regular examination preparation	3.68	0.498
Teachers’ pedagogical knowledge and skills	3.63	0.749
Effective written communications skills	3.59	0.491
Effective study methods	3.57	0.633
Medium of study (English/Bangla)	3.56	0.401
Teachers’ professional knowledge and credentials	3.52	0.498
Self-confidence	3.49	0.495
Teachers who can inspire students’	3.48	0.398
Tutorial support	3.46	0.491
Self-motivation	3.45	0.489
Self-discipline	3.43	0.491
Regular study practice	3.41	0.401
Teacher student relationship	3.41	0.401
An appropriate balance between academic commitments and social life	3.35	0.403
The desire to learn	3.34	0.749
Financial security	3.31	0.493
Consistent effort of the learners	3.27	0.749
Creative and critical thinking ability	3.24	1.021
Clear understanding of teachers’ expectation by the students’	3.23	0.491
Family support	3.22	0.401
Encouragement, motivation and support from teachers’	3.21	0.491
Satisfactory accommodation	3.19	0.401
A stable personal life	3.17	0.981
Linkage of the study subjects with career goal	3.14	0.406
Regular and comprehensive feedback by teachers’	3.13	0.801
General academic ability	2.99	0.491
Willingness to ask for help from peers	2.97	0.491
Regular use of the library	2.97	0.401
Hard work, commitment and dedication	2.96	0.633
Effective examination techniques	2.95	0.401

Support from peer group	2.93	0.491
Adaptability with University procedures and guidelines	2.91	0.401
Ability to work as a member of a group	2.89	0.491
Clear guideline with expected learning outcome	2.89	0.749
Ability to learn independently	2.89	0.301
Willingness to ask for help from teachers'	2.88	0.749
Encouragement, motivation and support from parents'	2.88	0.749
Availability of quality learning resources	2.82	0.765
Ability to manage stress	2.81	0.401
Implementation of theory into practice	2.81	0.633
Involvement in co-curricular activities	2.61	0.633
Access to resources such as libraries and internet	2.77	1.097
Positive influence of friends	2.96	0.301
Student's attitude towards learning	2.75	0.633
Continuous assessment	2.71	0.633
Willingness to accept academic challenge	2.66	0.633
Encouragement, motivation and support from peer	2.61	0.749

3.2 Failure Factor Statement Responses

The items on failure factor also covered the range from 1 (Not Influential) to 4 (Highly Influential). The item most likely to contribute to student failure by first-year students was 'Lack of interest in the course content' (mean 3.68). The item rated lowest which contributed to student failure was 'Part-time job by the students' (mean 2.32). Other uppermost failure factors influencing students' academic performance included: Inadequate or poor exam preparation (mean 3.62); Irregular attendance at lectures/tutorials (mean 3.62); Late submission of assignments (mean 3.54); Lack of self-discipline (mean 3.51); Lack of self-motivation (mean 3.49); Lack of confidence (mean 3.45); Inability to distinguish between important and unimportant information (mean 3.45); Heavy course workload (mean 3.44); Inefficient time management (mean 3.42); Previous poor academic foundation (mean 3.41); Insufficient effort (*e.g.*, study, exam prep) (mean 3.39); Personal or family crisis (mean 3.39); Financial problems (mean 3.35); Poor study techniques (mean 3.34) and so on (Table 2).

Table 2. Comparison of mean ratings on ‘failure factor’ items from first-year students

Question Items	Mean	Std. Deviation
Lack of interest in the course content	3.68	0.621
Inadequate or poor exam preparation	3.62	0.491
Irregular attendance at lectures/tutorials	3.62	0.749
Late submission of assignments	3.54	0.491
Lack of self-discipline	3.51	0.498
Lack of self-motivation	3.49	0.495
Lack of confidence	3.45	0.49
Inability to distinguish between important and unimportant information	3.45	0.633
Heavy course workload	3.44	0.633
Inefficient time management	3.42	0.401
Previous poor academic foundation	3.41	0.749
Insufficient effort (<i>e.g.</i> , study, exam prep)	3.39	0.81
Personal or family crisis	3.39	0.638
Financial problems	3.35	0.451
Poor study techniques	3.34	0.398
Badly structured presentations by lecturers	3.33	0.491
Poor study skills of students	3.32	0.749
Boring presentations by lecturers	3.31	0.701
Unclear criteria and lecturers’ expectations of assignments	3.29	0.401
Textbooks available in one language only	3.29	0.635
Inability to balance study and social commitments	3.27	0.491
Too much dependency on directions/guidance by teachers’	3.23	0.749
Teachers’ lacking to understand the needs of students’	3.21	0.491
Inappropriate and biased assessment procedures by teachers	3.21	0.749
Lack of persistence	3.19	0.489
Low self esteem	3.13	0.921
Inability to cope with stress	3.13	0.491
Failure to approach lecturers/tutors for help	3.12	0.491
Lack of self-assessment	3.11	0.801
Lack of academic ability	2.99	0.401
Personal clash with the teachers	2.99	0.633
Lack of ability to bridge between theory and practice	2.96	0.491
Too many extra unnecessary interests	2.95	0.921

Poor examination techniques	2.94	0.491
Low input from lecturers to motivate the students	2.93	0.981
Poor language abilities of lecturers	2.92	0.401
Laziness or apathy	2.91	0.491
Misinterpretation of course requirements	2.91	0.749
Fear of failure	2.89	1.097
Too many demands on students' time	2.88	0.401
Inability to make use of higher order thinking skills	2.86	0.497
Failure to understand the depth of understanding required at tertial level	2.83	0.401
Lack of a clear career goal	2.81	0.401
Inadequate university library facilities	2.81	0.459
Lack of communication between teacher and student	2.78	0.401
Lack of rewards for student efforts	2.77	0.821
Lack of maturity from the students'	2.65	0.633
Influence of Peer group	2.64	0.901
Teachers' unrealistic high expectations on students	2.62	0.401
Health and well being	2.61	0.301
Noisy classroom environment	2.56	0.749

4. Discussion

Findings from this study support the previous research findings and existed literature that appropriate choice of course of study; students' interest in the subject; regular attendance at lectures; timely and regular examination preparation; teachers' pedagogical knowledge and skills; effective written communications skills; effective study methods; teachers' professional knowledge and credentials; self-confidence; self-motivation and self-discipline of student are the topmost key success factors academic performance. On the other hand, lack of interest in the course content; inadequate or poor exam preparation; irregular attendance at lectures/tutorials; late submission of assignments; lack of self-discipline, self-motivation and confidence; inability to distinguish between important and unimportant information; heavy course workload; inefficient time management; previous poor academic foundation; insufficient study effort; personal or family crisis; financial problems; poor study techniques; badly structured and boring presentations by lecturers are few of the many factors which cause failure for the students (Figure 1).

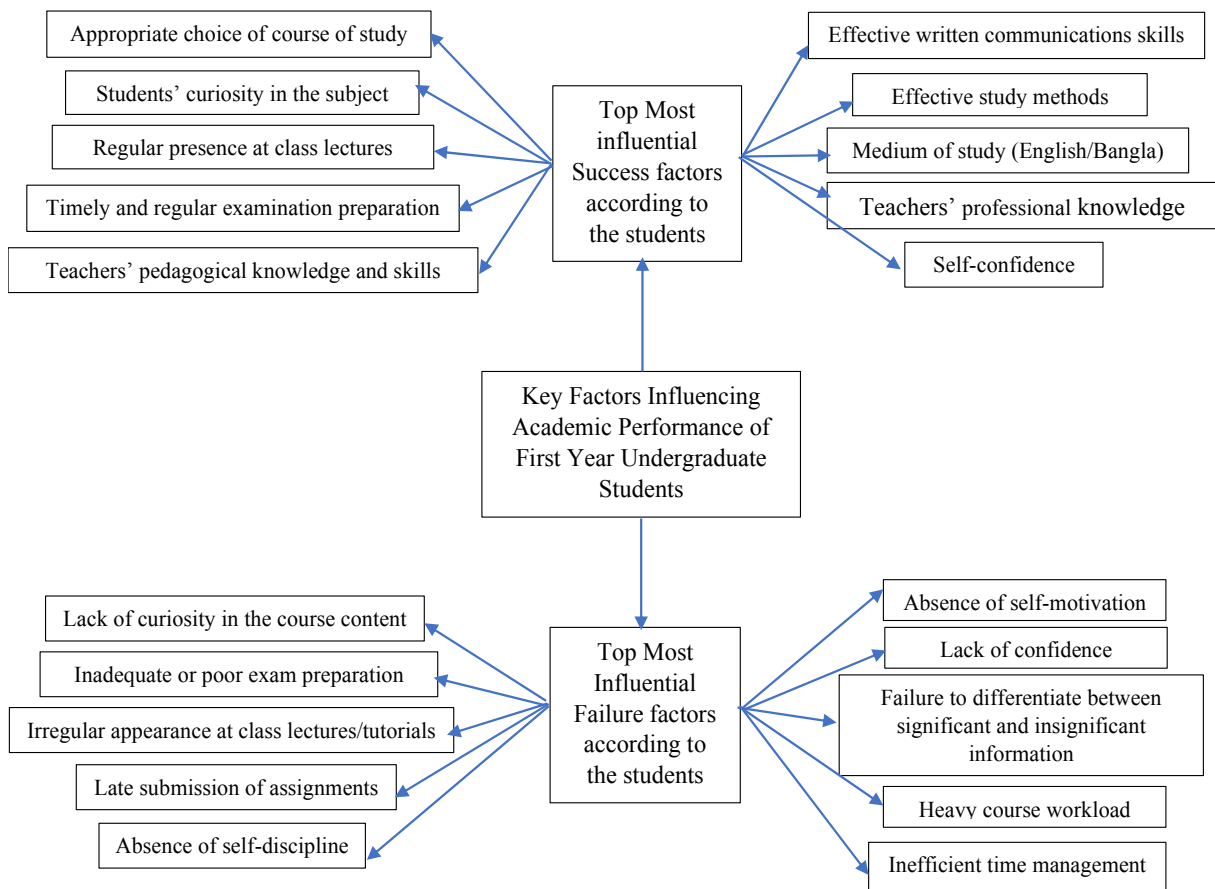


Figure 1. Key factors influencing academic performance of first year undergraduate students

In Bangladesh, students and their family give huge emphasis on course selection at university level based on the future job market. Parents and students feel secured if students can enroll into a course which can help them to ensure future job security. Thus, the opportunity of appropriate choice of course at university gives massive advantage to the students. At the same time, students who are not in their choice of course feel enormous pressure and their performance is also hampered.

Another significant factor impacting students' academic performance was regular class attendance and timely examination preparation and assignment submission. Students perceived these factors as crucial for their academic success or failure. As per the finding of this study, for first-year students, self-confidence; self-motivation and self-disciplines are the most important personal traits which determines the success and failure at university level. Writing skill works as a controlling factor for students' to be successful in their university life as written assessment is the main method to evaluate students' academic performance in Bangladesh, Therefore, effective written communications skills was ranked as top-level influencing success factor by the first-year students.

The findings suggests that, teachers' content knowledge, pedagogical knowledge, skills and relation with students also works as controlling factors for student's performance. This

finding supports M. Bamidele and A. Bamidele (2013) assertion that teachers/lectures are key factor for student's success. Kunter et al. (2008) [cited in Hien et al. (2020)], found that enthusiastic teaching, characterized with teachers' express style and energetic, animated, inspiring teaching, particularly produces high-quality learning and is indicative of student outcomes and interest.

In the context of this study, learning conditions like family support; encouragement, motivation and support from teachers', good accommodation; stable personal life; support from peers; availability of quality learning resources; regular use of the library; adaptability with university procedures and guidelines create a positive impact on students' academic life. Oppositely, inability to cope with stress; failure to approach lecturers/tutors for help; lack of self-assessment; too many extra unnecessary interests; procrastination; fear of failure; inadequate university library; lack of maturity from the students'; influence of peer group impact academic performance in reverse.

5. Conclusion

The results of the study provide an important insight into the factors that affects first-year student's academic performance. The results of this study cannot be generalized to other contexts although the results support findings from several earlier studies. Further research might consider increasing the population size to gain much deeper insights into the perceptions. It may also help to undertake a different research methodology to understand the influencing factors for students' academic performance.

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